

## Before You Buy-Before You Build

Are you thinking of buying property by a river for your new office building, store or shopping center? Or maybe you’d like to build a little cottage by a pond, lake or stream? Maybe you want to expand your existing building or home and a small stream is in the way, or you need to cross a stream with your new driveway.

In all these cases you are most likely in a flood plain and you probably need a Stream Encroachment Permit before you build. In New Jersey and throughout the country, building in areas subject to flooding is regulated to protect lives, property, and the environment.

New Jersey regulates construction in the flood plain under the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and its implementing rules at N.J.A.C. 7:13.

## What Is the Flood Plain?

The flood plain is the area adjacent to a stream, lake or pond, which is covered by floodwater when it rains. This area can shrink or expand depending on how much it rains. In general, the regulated flood plain is the area that would be covered by water during the “100 year storm” — a storm which has a 1 in 100 chance of occurring in any one year period.

## Why Regulate Work in a Flood Plain?

The state regulates work in flood plains for two reasons. First, such regulation protects the person who is building from loss of life and property in case of a flood. Flooding causes an estimated \$3 billion of damage in the United States every year. State regulations minimize the damage by ensuring that buildings are placed in safe areas, and are constructed to withstand high water.

The second reason to regulate building in flood plains is to protect other properties along the stream or pond from flood damage. When you build on a flood plain and the waters begin to rise, the buildings on your property displace water, thus increasing the height of the rising waters and

making the flooding worse everywhere along the banks. In addition, your buildings and pavement cover the natural ground surface that would have helped soak up the water. Therefore, the more buildings and pavement allowed, the higher the flood waters along that water body will rise, and the worse the flooding problems will get. Even if a building is permissible in the flood plain, regulations are necessary to ensure that it is strongly constructed so that it won’t wash away in flood waters, causing danger and damage downstream.

## What Are the Floodway and the Flood Fringe?

The flood plain is made up of two parts — the floodway and the flood fringe. The floodway is the inner area where floodwaters are deep and move fast. The floodway always includes the stream bed or lake bed where the water normally flows, and usually extends to the top of the bank (if there is a defined bank) and sometimes beyond. The flood fringe is the outer area where flood waters move more slowly, appearing more still, like a lake or pond.

A building in a floodway will block the water’s flow, backing up water and causing flooding upstream to worsen. A building in a flood fringe will prevent flood waters from spreading out, thus forcing floodwaters downstream faster and increasing downstream flooding.

## How Do I Know if My Property Is in a Flood Plain?

Every stream, river, pond or lake has a flood plain. If your property has a stream running through it or near it and the land is relatively flat, it probably contains some flood plain. However, if the water body on your land is a lake or pond, or if your land slopes steeply down to a stream, most of your land may lie outside of the flood plain. Since a flood plain’s size depends on so many factors, it can be accurately determined only through a detailed engineering analysis, in which an engineer calculates and maps the flood plain based on water movement and topography.

The State and Federal governments have already calculated and mapped the flood plains on some larger streams and rivers in New Jersey. Although these maps do not show all of the flood plains in New Jersey, and omit many smaller streams, they are a good starting point. Federal Flood Insurance Maps are usually available at municipal offices. State flood plain maps can be obtained from the Department of Environmental Protection’s Flood Plain Management Office at (609) 292-2296.

If your stream, lake, or pond is not already mapped, you can obtain a free jurisdictional determination from the DEP. Call the DEP at the number at the end of this pamphlet for information on how to apply.

## What if I Want to Build in a Flood Plain?

There are two types of stream encroachment permits — minor and major. If the flooding impact of an activity is easy to assess, and the activity will have only minor impacts on flooding, the activity will require a minor permit. An activity whose flooding impact cannot be assessed without complex calculations, and which may have a substantial impact on flooding, will require a major permit. For example, a minor permit is required for a utility line, footbridge, or single family home (that is not part of a larger development), while a major permit is required for a road crossing over a stream, or a large or complex project. In some cases, the work you want to do may not require a permit at all.

If you need to apply for a major or minor permit, you will probably have to hire a licensed engineer to prepare drawings of the proposed work. In addition, for a major permit, you will need the engineer to prepare calculations showing the effect of your project on upstream and downstream flooding conditions.

## Are There Other Regulations I Should Know About?

Check the table of DEP Land Use Regulation Programs to see if you may be affected by any other DEP Land Use Regulation Programs. In addition, the following regulatory programs administered by other agencies may affect projects in New Jersey flood plains:

- ❑ BOCA (Building Officials and Code Administrators) National Building Code. This Code contains special requirements for buildings in flood plains, which many towns enforce. Contact your town offices.

- ❑ Local flood plain ordinances. Contact your town offices.

- ❑ The Federal Emergency Management Agency (FEMA) provides some flood maps and flood insurance information. Call (800) 358-9616.

- ❑ Federal Wetlands Program (404 Program). In some parts of New Jersey, in addition to a DEP freshwater wetlands permit, you may also need a federal wetlands permit, issued by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. An Army Corps permit is needed in the Hackensack Meadowlands area, Greenwood Lake, and in any tidally flowed waters or wetlands. Contact the U.S. Army Corps of Engineers in Philadelphia at (215) 656-6500, or New York City at (212) 264-4185 or 264-6731.

### DEP LAND USE REGULATION PAMPHLETS:

- Guide to NJ’s Coastal Permitting Program
- Guide to NJ’s Freshwater Wetlands Permitting Program
- Guide to NJ’s Stream Encroachment Permitting Program

**TO CONTACT DEP: (all area codes are 609)**  
Essex, Morris, Bergen 633-9277  
Middlesex, Hudson, Somerset, Union 633-6754  
Hunterdon, Mercer, Passaic, Sussex, Warren 984-0194 or 777-0454  
Cumberland, Camden, Salem, Gloucester 984-0162 or 633-6755  
Cape May, Monmouth Atlantic, Ocean, Burlington 984-0288 or 292-8262

DEP LAND USE REGULATION PROGRAMS

Law	Natural feature protected	Types of activities regulated
Freshwater Wetlands Protection Act, N.J.S.A. 13:9B (rules at N.J.A.C. 7:7A)	Freshwater wetlands	Disturbance or destruction of water level, soil or vegetation, such as by draining, filling, or clearing
	Transition areas or “buffers” around freshwater wetlands	Same activities as in freshwater wetlands, except that normal property maintenance is allowed
	Lakes, ponds, rivers, streams, etc.	Discharge of dredged or fill material
Flood Hazard Area Control Act (stream encroachment), N.J.S.A. 58:16A (rules at N.J.A.C. 7:13)	Rivers, lakes, and streams, and their flood plains	Any construction activity or human land disturbance, such as placement of structures or fill, excavation, dredging
Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19 (rules at N.J.A.C. 7:7 and 7:7E)	Most shore areas south of Cheesequake Creek and along the Delaware south of Kilcohook National Wildlife Refuge	Development activities, including excavation, grading, filling, and site preparation; and construction or placement of structures, including docks, bulkheads, shore protection structures, single family homes, residential developments, and commercial or industrial facilities
Waterfront Development Act, N.J.S.A. 12:5-3 (rules at N.J.A.C. 7:7 and 7:7E)	All land within or under tidally flowed waters throughout New Jersey; and in addition land adjacent to tidally flowed waters outside the CAFRA area, up to a maximum of 500 feet from the high water line	
Wetlands Act of 1970, N.J.S.A. 13:9A (rules at N.J.A.C. 7:7 and 7:7E)	Wetlands shown on the DEP Coastal Wetland Maps	Placement of structures or fill, excavation or dredging, application of pesticides
Tidelands Act, N.J.S.A. 12:3-1	Lands that are now tidally flowed, or were formerly tidally flowed (unless specifically granted to another owner by the State)	Placement of a structure that will exist for more than ten days, excavation, dredging

Land Use Regulation Program  
Department of Environmental Protection  
501 East State Street  
P.O. Box 439  
Trenton, New Jersey 08625-0439  
Telephone: 609-292-0060  
Fax: 609-292-8115  
www.state.nj.us/dep/landuse

The DEP has made every effort to ensure that the information provided here is accurate. However, this pamphlet is only a general guide. For a complete, detailed description of the DEP Stream Encroachment program, please refer to the stream encroachment regulations at N.J.A.C. 7:13.

April 1999

Guide to  
New Jersey’s Stream  
Encroachment  
Permitting Program



New Jersey Department of  
Environmental Protection